

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

Γ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
	09/822,978	03/30/2001	Paul E. Bender	010190	8948	
	23696	7590 10/04/2006		EXAMINER		
	QUALCOMM INCORPORATED			MOORE, IAN N		
	5775 MOREH SAN DIEGO,			ART UNIT	PAPER NUMBER	
	,			2616		
				DATE MAILED: 10/04/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

			<del></del>	ڏلا					
Office Action Summary		Application No.	Applicant(s)	•					
		09/822,978	BENDER ET AL.						
		Examiner	Art Unit						
		lan N. Moore	2616						
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
1)⊠	Responsive to communication(s) filed on <u>05 September 2006</u> .								
2a)⊠	a)☑ This action is <b>FINAL</b> . 2b)☐ This action is non-final.								
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dispositi	ion of Claims								
5)□ 6)⊠ 7)□	<ul> <li>4)  Claim(s) 1,6,11,12,14-17,19-22,24-26,30,32,33 and 35 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1,6,11,12,14-17,19-22,24-26,30,32,33 and 35 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>								
Applicati	on Papers								
Application Papers  9) ☐ The specification is objected to by the Examiner.									
· —	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
,—	Applicant may not request that any objection to the			-					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority u	ınder 35 U.S.C. § 119								
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
2) Notice 3) Information	t(s) te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) tr No(s)/Mail Date	4) N Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	ate. <u>7/13/2006</u>						

### **DETAILED ACTION**

### Claim Objections

1. Claims 1,6,26,30 and 33 are objected to because of the following informalities:

Claim 1 recites, "said overhead parameters" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites, "said access terminal" in line 5 and "said overhead parameters" in line 8. There are insufficient antecedent basis for theses limitations in the claim.

Claim 26 recites, "said access terminal" in line 5 and "said overhead parameters" in line 9. There are insufficient antecedent basis for theses limitations in the claim.

Claim 30 recites, "said access terminal" in line 6 and "said overhead parameters" in line 10. There are insufficient antecedent basis for these slimitations in the claim.

Claim 33 recites, "said access terminal" in line 6 and "said overhead parameters" in line 10. There are insufficient antecedent basis for these limitations in the claim.

Appropriate corrections are required.

## Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 21 and 30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter on the basis of nonfunctional descriptive material.

Claim 21 recites, "A computer readable medium embodying a method..." in line 1.

The computer readable medium <u>cannot</u> embody a method/program "<u>without</u>" first encoded with an instruction/program capable of being executed by a computer.

A computer readable medium embodying a method is not statutory because it does not do anything without "first encoded with an instruction/program capable of being executed by a computer, and thus they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature, which constitute "descriptive material." Abstract ideas, Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, Schrader, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, are not patentable. (Emphasis added)

Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. Such a result would exalt form over substance. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). (Emphasis added)

Art Unit: 2616

A computer readable medium embodying a method is neither computer components nor statutory processes, as they are not "acts" or "computer program" being performed by a computer processor. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. Thus, the claim is non-statuary. (Emphasis added)

Claim 30 also rejected for the same reason as set forth above in claim 21.

### Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 11,6,11,12,14,15,16,17,19,20,21,22,24,25, 26,30,32,33, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Tidemann (US005392287A).

Regarding claim 1,6, 26, 30 and 33, Tiedemann discloses an apparatus system or an access network (see FIG. 3, base station 120) for transmitting control channel information (see FIG. 1, paging via control signal/channel) in a communication system (see FIG. 1, digital cellular communication system; see col. 3, line 18-33), comprising:

a controller (see FIG. 3, a combined system of transmit processor 126, pilot generator 136 and slot generator 130; see col. 7, line 26-49) configured to partition a time interval (see FIG. 4, 5a, a time slot; see col. 4, line 1-25; col. 6, line 16-60) during which a control channel

Application/Control Number: 09/822,978

Art Unit: 2616

capsule (see FIG. 1, paging via control signal/channel; see col. 7, line 7-10,40-45,62-65) is transmitted into a first time period (see FIG. 5a, time slot n) and a second time period (see FIG. 5a, time slot n+1);

a transmitter unit (see FIG. 1, transmitter 10, or see FIG. 3, transmitter 141) configured to transmit a packet directed to an access terminal (see FIG. 2a-d and FIG. 5, 5a, a message/data/packet associated the mobile station/receiver contains unicast information (i.e. Address field 220 with mobile ESN address 222) is sent to mobile station; see col. 7, line 11-35; see col. 8, line 16-50), and a signature (see FIG. 5a, sequence number field (with sequence number 228)) during said first time period (see FIG. 5a, a message/data/packet field 220 and sequence number field 114 are transmitted in time slot n; see col. 8, line 45-52), said signature indicative of a change in a set of overhead parameters (see FIG. 5a, sequence number field 114 indicates/shows whether overhead information/parameters are updated/changed; see col. 8, line 54 to col. 9, line 10); and

said controller further configured to instruct said transmitter unit (see FIG. 3, the combined system of 126,136 and 130 controls the transmitter 141) to transmit a set of overhead parameters (see FIG. 5b, overhead information in message 116) during a said second time period (see FIG. 5b, during time slot n+1; see col. 9, line 6-20), said overhead parameters including system configuration information associated with said access network (see col. 9, line 13-20; see col. 8, line 53-60; see col. 7, line 30-43; see col. 7, line 45-65; transmit overhead/instruction configuration information).

Regarding claim 11, 16,21 and 32, Tiedemann discloses an access terminal (see FIG. 1, receiver 12/14 of an mobile station) for monitoring a control channel (see FIG. 1, paging via

Art Unit: 2616

control signal/channel) in a communication system (see FIG. 1, digital cellular communication system; see col. 3, line 18-33), comprising:

a receiver unit (see FIG. 1, Receiver 12/14, or see FIG. 3, mobile station user receiver 122) configured to receive:

a packet directed to said access terminal (see FIG. 2a-d and FIG. 5, 5a, a message/data/packet associated the mobile station/receiver contains unicast information (i.e. Address field 220 with mobile ESN address 222) is sent to mobile station; see col. 7, line 11-35; see col. 8, line 16-50), and a signature (see FIG. 5a, a combined field of sequence number field (with sequence number 228) and MORE\_PAGE field 98 (see FIG. 2d)) during a first time period (see FIG. 5a, a message/data/packet field 220 and a combined field 114-98 are transmitted in time slot n; see col. 8, line 45-52); and

a controller (see FIG. 3, a combined system of slot generator 152, receiver processor 164 and power control 147; see col. 7, line 45 to col. 8, line 30) configured to instruct said receiver unit whether to stop monitoring said control channel (see col. 9, line 16-19; not performing any additional action/monitoring) during a second period subsequent to said first time period (see FIG. 5b, time slot n+1; see col. 9, line 6-20), if said signature indicates that a set or overhead parameter is up to date (see col. 9, line 1-14,16-19; when the values of sequence number 228 and 230 remain unchanged, it shows/indicates that overhead information has the updated information (i.e. up to date), then the processor of a receiver no longer performing any additional action/monitoring (i.e. stop monitoring)).

Regarding claims 12,17,22, and 35, Tiedemann discloses said signature indicative of a change in said set of overhead parameters (see col. 8, line 54 to col. 9, line 15; sequence number

Application/Control Number: 09/822,978 Page 7

Art Unit: 2616

(i.e. 228, 230) indicates/shows of a change/update in overhead information/parameter (i.e. a sequence numbers 228 and 230 are compared against each other to determine whether overhead information message has the updated information (i.e. up to date)).

Regarding Claims 14,19 and 24, Tiedemann discloses entering a standby mode (see col. 8, line 1-30; receiving entering into inactive/standby state) at the end of said first time period if said signature indicates said set of overhead parameter is update to date (see col. 9, line 1-14,16-19; when the values of sequence number 228 and 230 remain unchanged (i.e. up to date) and MORE\_PAGE field 98 (see FIG. 2d) is set to zero, "0" (i.e. not waiting for additional message having the new overhead information), the mobile station enters inactive/standby state; see col. 7, line 65 to col. 8, line 30).

Regarding claims 15, 20, and 25, Tiedemann discloses monitoring said control channel to receive said set of overhead parameters during said second time period, if said signature message indicates that said set of overhead parameters is not up to date (see col. 8, line 54 to col. 9, line 20; when sequence numbers are different, there are additional overhead information and the overhead information is not up to date).

### Response to Arguments

6. Applicant's arguments with respect to claims 1,6,11,12,14,15,16,17,19,20,21,22,24,25, 26,30,32,33, and 35 have been considered but are moot in view of the new ground(s) of rejection.

Application/Control Number: 09/822,978 Page 8

Art Unit: 2616

### Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ INM 9-28-06

> DORIS H. 10 SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600